

REMARKS

This responds to the Office Action mailed on August 16, 2006.

Claim 47 has been amended. No claims have been canceled or added by way of this response. Claims 37-40 and 48-52 stand withdrawn. As a result, claims 22-29, 35-40 and 46-52 are now pending in this application.

Previously Submitted Information Disclosure Statement

Applicants submitted an Information Disclosure Statement and 1449 Form on December 29, 2003. To date, Applicants have not received the Form 1449 filed therewith and marked as being considered by the Examiner. Pursuant to the provisions of MPEP 609, Applicants respectfully request that the initialed copy of the 1449 Form be returned to Applicants' Representatives to indicate that the cited documents have been considered by the Examiner.

Amendment to Claim 47

Claim 47 has been amended by substituting "electronic assembly" for "component package" to conform the preamble of claim 47 to that of claim 36, upon which it is dependent. No new matter has been introduced.

Rejection of Claims 22-29, 35, 36, 46, and 47
Under 35 U.S.C. §102(e)
as Anticipated by Chaudhuri

Claims 22-29, 35, 36, 46, and 47 were rejected under 35 U.S.C. §102(e) as being anticipated by Chaudhuri et al. (U.S. 6,660,560).

Submitted herewith is a declaration under 37 CFR §1.131, which swears behind Chaudhuri. In view of the declaration, Applicants respectfully submit that the rejection is now moot and should be withdrawn, and that claims 22-29, 35, 36, 46, and 47 are allowable.

In his "Response to Arguments", the Examiner asserted that the earlier Declaration submitted with Applicants' "Supplemental Amendment & Response Under 37 C.F.R. 1.116"

filed January 20, 2004, was ineffective to overcome Chaudhuri, because the Examiner asserted that the evidence submitted was insufficient to establish/corroborate conception of the potentially inhibiting particles embedded in a terminal, pad, or both. The Examiner further asserted that the exhibits provided only evidence of squeezing out particles between the bumps, as indicated for example in Exhibit A.

Exhibit A of the current Declaration is a copy of Applicants' Invention Disclosure Form, and it is identical to Exhibit A of the earlier Declaration. Paragraph 13 of Exhibit A (Page 5) states:

The high placement force and low viscosity of the no-flow materials can effectively increase the contact opportunity between bump and pad and facilitate the squeezing out of silica particles in between the bumps and bump-shaped pre-solder pads during solder wetting process.

The above language describes "increasing the contact opportunity between bump and pad". It states that this facilitates the squeezing out of silica particles. This language implies that not all particles may be squeezed out, and some may be left between the bump and pad. Nowhere in Exhibit A is it stated that all particles are necessarily squeezed out.

Exhibit C of the current Declaration is an optical microphotograph of a cross-section of an IC-to-substrate interconnection fabricated in accordance with an embodiment of the present invention prior to January 4, 2001. Exhibit C shows that most but not all potentially inhibiting particles are removed from between a terminal and pad, with one or more particles being embedded in one of the terminals, in its corresponding pad, or in both the one terminal and its corresponding pad without preventing adequate physical and electrical contact.

For the above reasons, Applicants respectfully request that the Examiner hold the current Declaration effective to antedate the Chaudhuri reference, to withdraw such reference, and to allow claims 22-29, 35, 36, 46, and 47.

Conclusion

Applicants respectfully submit that claims 22-29, 35, 36, 46, and 47 are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney, Walter W. Nielsen (located in Phoenix, Arizona) at (602) 298-8920, or the below-signed attorney (located in Minneapolis, Minnesota) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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